

The term keystone envelope or opening is a term that is known to those skilled in the art. The term is generally accepted as meaning an opening in a faceplate or other electrical device that is sized to accept an RJ-45 jack. See attached web pages for reference to the term "keystone".

Therefore, the term "keystone envelope" is not indefinite and the rejection under §112, second paragraph should be withdrawn.

Rejections Under 35 U.S.C. §103(a)

Independent claim 1 covers an adapter 10 for a communication system, including a body 11 having a longitudinal axis y with a first longitudinal end 18 of the body defining a first opening 58 therein, and a second longitudinal end 20 of said body defining a second opening 64 therein coaxial to the first opening. A first plug 12 is receivable in the first opening, and a second plug 14 is receivable in the second opening in at least a first position and a second position. The first position being angular offset relative to the second position about the longitudinal axis of the body. Placement of the second plug in the second position results in a polarity reversal of the system relative to placement of the second plug in the first position.

By forming an adapter in this manner, terminated ends of cables can be coupled together, and at least one plug can be placed in one of two positions, thereby ensuring proper polarity of the system and avoiding possible rewiring for correction of a wiring problem.

Claims 1-9 and 11-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,268,109 to Hardesty in view of U.S. Patent No. 5,593,323 to Dernehl. The Hardesty patent is cited for an adapter 30 for electrically connecting two telephone plugs 26.

Allegedly, this adapter is capable of receiving a first plug 26 and a second plug 26 in first and second positions, the first position being angular offset from the second position.

The Action refers to Fig. 14 to show the longitudinal axis and the first opening; however, there is no Fig. 14 in the Hardesty patent, and there is no clear description of a "longitudinal axis" in the Hardesty patent. Additionally, the Hardesty patent allegedly discloses icon identification. Although the Action identifies the "ion" [sic] identification as reference numerals 118 and 128, these reference numerals do not appear in the Hardesty patent. Furthermore, the Action alleges that the first opening is connected to the second opening through a passage 151. Again, there is no reference numeral 151 used in the Hardesty patent, Applicant assumes that the Action was referring to elongated portion 51. Clarification of these points would be appreciated.

The Action further states that the Hardesty patent does not disclose the second position being a polarity reversal of the system, relative to the polarity of the first position. For the teaching of polarity reversal, the Examiner relies on the Dernehl patent, and states that it would have been obvious to add the Dernehl patent polarity reversal means to the Hardesty device for improving the interconnection and for reducing the cost in a redesign of a new system.

This rejection is respectfully traversed.

The combination of the Hardesty and Dernehl patents does not does not disclose, teach or render obvious all the elements of amended independent claim 1. Specifically, neither patent alone nor in combination discloses, teaches or suggests an adapter that can accept first and second plugs, the second plug receivable in an opening in at least a first position and a second position angularly offset about the longitudinal axis of the body of the adapter.

The Hardesty patent discloses a coupler 30 that allows telephone cords which both have been terminated with modular plugs 24 to connect together. However, neither plug 24 can be rotated about the *longitudinal* axis of the body of the coupler 30 and thereby couple to the coupler in angularly offset first and second positions. Each plug can only be plugged into the coupler in one angular position relative to the longitudinal axis.

The Dernehl patent teaches a connector 46 designed to reversibly mate electrically and mechanically with receptacle 32. Clearly, the Dernehl patent does not disclose, teach or suggest an adapter that can accept first and second plugs, the second plug receivable in an opening in at least a first position and a second position about the longitudinal axis of the body of the adapter.

Therefore, neither the Hardesty nor the Dernehl patent disclose, teach or render obvious all the elements of independent claim 1, and thus claim 1 is allowable over the cited patents.

Furthermore, the combination of the Hardesty patent and the Dernehl patent is inappropriate. For example, assuming *arguendo* that the Hardesty patent could except a plug in a second orientation, as suggested in the Office Action, the Hardesty electrical system could not be "reversed". In the preferred embodiment of the Hardesty patent, six contact element compartments 45 are used, enabling six contacts to fit therein. Regardless of the number of contacts (4, 6 or 8), if the second plug is rotated about the longitudinal axis relative to the first plug (for example, if the second plug is rotated 180°, in an attempt to reverse the polarity) then contact 1 of the second plug would electrically connect to contact 6 of the first plug, contact 2 would contact to contact 5 and contact 3 would connect to contact 4. This would not result in a "reversal" of polarity, rather just an inability for the desired data to be transferred through the electrical system due to this improper connection.

In the Dernehl patent, the electrical current actually changes in direction through plug 12 to allow each contact 22 and 23 to be positive or negative. Since merely suggesting that the system described in the Hardesty patent can be "reversed" is inappropriate, this rejection cannot stand.

To further differentiate claim 1 from the Hardesty patent, by changing the angular orientation of the second plug in the present invention, each of the wires 153 and 155 can either be send or receive wires, depending on the angular orientation of the second plug relative to the first plug, and the manner in which corresponding wires are installed. Since the second plug wires being either be send or receive wires, the system is reversible. However, in a system such as the preferred system described in the Hardesty patent, there are three pairs of send and receive contacts. By inverting one plug relative to another plug, the send and receive wires in a contact pair are not reversed. Rather, the send and receive wires in one plug are mismatched with other send and receive wires in the mating plug, as described above, rendering the Hardesty coupler inoperative for its intended purpose.

Therefore, the proposed combination of the Hardesty patent and the Dernehl patent is not obvious.

Accordingly, claim 1 is patentably distinguishable over the cited patents.

Claims 2-10, 21 and 22 being dependent on claim 1 are also allowable for the above reasons. Moreover, these dependent claims recite additional features further distinguishing them over cited patents. Several claims recite information that is clearly not disclosed or suggested in the cited prior art. Claim 2 recites that the second opening is substantially symmetrical about a plane including the longitudinal axis. Claim 3 recites that the second position is offset by 180

degrees relative to the first position about the longitudinal axis. Claim 4 recites that the first end has icon identification ports. Claim 6 recites that the first plug abuts the second plug when the first plug is received within the first opening and the second plug is received within the second opening. Claim 7 recites that the adapter is received within an aperture in a faceplate. Claim 8 recites that the adapter releasably engages the faceplate. Claim 9 recites that the aperture in the faceplate is a keystone envelope.

Furthermore, claims 5 and 10 recite elements that in combination with the other elements of independent claim 1 distinguish them from the prior art. Claim 5 recites that the first opening and the second opening are connected by a passageway extending through said body, and claim 10 recites that the first and second plugs are MT-RJ type plugs.

Claims 21 and 22 are discussed in more detail below.

#### Independent Claim 11

Since independent claim 11 includes recitations substantially similar to independent claim 1, namely an adapter having first and second plugs, the second plug being receivable in an opening in at least a first and a second position, which results in a polarity reversal of the system, it is allowable for the reasons stated above. Such reasons are not repeated to avoid burdening the record.

Accordingly, claim 11 is patentably distinguishable over the cited patents.

Claims 12-15, 23 and 24 being dependent on claim 11 are also allowable for the above reasons. Moreover, these dependent claims recite additional features further distinguishing them

over cited patents. For example, claims 12-15 are also distinguished for the reasons advanced above relative to claims 7-10, respectively.

Claims 23 and 24 are discussed in more detail below.

Claims 10 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Hardesty patent in view of the Dernehl patent in further view of U.S. Patent No. 6,379,052 to de Jong et al. The Hardesty and Dernehl patents are cited for the reasons stated above. The de Jong et al. patent is cited for using an MT-RJ plug. In support of the rejection, it is alleged that it would have been obvious to use an MT-RJ plug in the Hardesty coupler, since it is within the general skill of a worker in the art.

This rejection is traversed.

As noted above claims 10 and 15 are allowable since they are dependent from claims 1 and 11, respectively. Additionally, the de Jong et al. patent does not overcome the deficiencies of the Hardesty and Dernehl patents. Specifically, the de Jong patent does not disclose, teach or suggest an adapter that can accept first and second plugs, with the second plug being receivable in an opening in two angularly offset positions about the longitudinal axis of the body of the adapter.

Arguably, the de Jong patent teaches using a fiber optic connector that can be physically “turned over” to reverse the polarity of the connection; however, there is no disclosure or suggestion in the de Jong patent of an adapter having two openings capable of receiving two separate plugs and coupling the two plugs together.

Accordingly, claims 10 and 15 are patentably distinguishable over the cited patents.

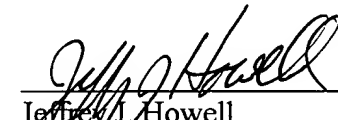
New Dependent Claims 21-24

As noted above, dependent claims 21 and 22 and 23 and 24 are allowable for the reasons discussed above, since they are dependent from claims 1 and 11, respectively. Furthermore, these claims further define the first and second plugs as including at least two optical wires. The prior art does not disclose reversing the polarity of system using optical wires, in combination with the elements recited in the independent claims.

Accordingly, claims 21-24 are patentably distinguishable over the cited patents.

In view of the foregoing, claims 1-15 and 21-24 are allowable. Prompt and favorable action is solicited.

Respectfully submitted,

  
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